

B3
contd

wherein said compound of formula I is released from the film formed by application of said composition to a skin surface.

REMARKS

The present amendments are to be entered prior to consideration of the Continued Prosecution Application ("CPA") filed contemporaneously herewith. Changes to claims 1, 22, 23, 28 and 29 are shown in the attached Appendix.

In the last Office Action, the Examiner maintained the rejection of claims 1-8 and 10-29 under 35 U.S.C. § 103(a) for reasons on record in the Office Action of May 3, 2002. Claim 9 was withdrawn from consideration subject to the restriction and election requirements and should be reconsidered when the pending claims are allowed.

By this Amendment, applicant addresses the Examiner's rejection of the claims 1-8 and 10-29 under 35 U.S.C. § 103(a) and thereby places the CPA in condition for allowance.

Claims 1-8 and 10-29 stand rejected as allegedly *prima facie* obvious over the teachings of U.S. Pat. No. 6,087,509 (Claussner-'509) or U.S. Pat. No. 5,750,553 (Claussner-'553) in view of U.S. Pat. No. 5,558,859 (Cretois), in further view of U.S. Pat. No. 5,916,910 (Lai), U.S. Pat. No. 5,541,220 (Ismail), WO 92/21317 (Galey), WO 91/19701 (Dumats), and EP 427 625 (Estradier). Final Office Action at 2-4. The Office acknowledges that neither Claussner-'509 nor Claussner-'553 "teach[es] preferred [(A)] film forming agents, [(B)] solvents, [(C)] plactiscizers and additives." Office Action of 12/21/01 at 4. The Office maintains that "[I]t would have been obvious to one of ordinary skill in the art . . . to modify the compositions of [either Claussner-'509 or

Claussner-'553] by using the teachings of [Cretois] and obtain a composition comprising [(D) a compound of] formula (I), vinylimidazolium methochloride/vinylpyrrolidone copolymer [(a species of (A))], polyethoxylated hydrogenated castor oil [(a species of (C))], and solvent [(B)]." *Id.* at 5.

The Office recognizes that "Cretois discloses compositions for the treatment of protection of the exoskeletal parts" Final Office Action at 2-4. Specifically, Cretois discloses "nonwashing cosmetic compositions for the treatment and the protection of keratinous exoskeletal parts, in particular the hair and the eyelashes . . ." Cretois at 1:35-38. Cretois does not teach treatment of non-skeletal parts such as skin.

The Office further acknowledges that the evidence of record discourages the administration of drugs exhibiting androgenic activity by means of application to skin. Final Office Action at 4. Since the evidence of record teaches away from the effective administration of compounds having androgenic activity, successful administration of compounds having androgenic activity upon release from the film formed by application of the compositions of the invention to a skin surface would be an unexpected result and an indicia of nonobviousness. *M.P.E.P.* § 2143.02. Applicants successfully demonstrate the release of a compound having androgenic activity from a film formed by application of a composition of the invention to skin according to the specification at pages 15-19.

Applicants respectfully submit that the foregoing amendments place claims 1-8 and 10-29 in condition for allowance. In view of the foregoing remarks, Applicants submit that this claimed invention, as amended, is neither anticipated nor rendered obvious in view of the prior art references cited against this application. Applicants

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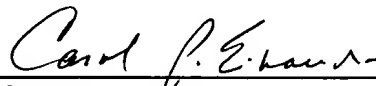
therefore request the entry of this Amendment, the Examiner's consideration of the CPA, and the timely allowance of the claims.

If there is any fee due in connection with the filing of this Preliminary Amendment, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,
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Dated: November 1, 2002

By: 
Carol P. Einaudi
Reg. No. 32,220

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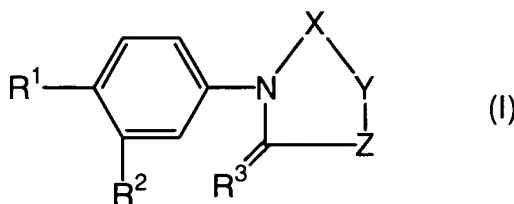
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APPENDIX

Amendments to the claims of Application Number 425,742 are indicated by underlining for additions and by bracketing for deletions.

1. (Amended) A composition comprising:

- a) at least one physiologically tolerated film-forming agent;
- b) at least one physiologically tolerated solvent;
- c) at least one plasticizer; and
- d) a compound of the formula I



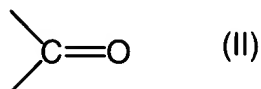
or a stereoisomeric form or a physiologically tolerated salt of any of the foregoing, in which:

- R¹ is
- 1) -CN,
 - 2) -NO₂,
 - 3) a halogen, or
 - 4) (C₁-C₄)-alkyl-C(O)-OH;

- R² is
- 1) -CF₃,
 - 2) a halogen, or
 - 3) -CN;

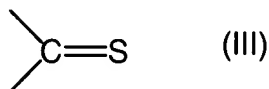
- R³ is
- 1) =O,
 - 2) =S, or

- 3) =NH;
- X is 1) a radical of formula II

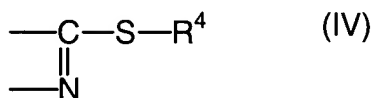


or

- 2) a radical of formula III



or X and Y together form a group of formula IV

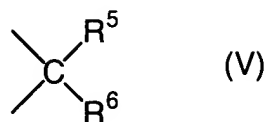


- in which R⁴ is
- 1) hydrogen atom,
 - 2) (C₁-C₆)-alkyl-,
 - 3) (C₂-C₆)-alkenyl-, or
 - 4) (C₁-C₆)-alkyl-,

wherein the alkyl is mono- to trisubstituted by

- 4.1 -OH,
- 4.2 halogens,
- 4.3 -O-(C₁-C₄)-alkyl,
- 4.4 -CN, or
- 4.5 -SH;

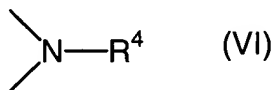
Y is 1) a radical of formula V



in which:

R^5 is, independently of R^6 , a hydrogen atom or (C₁-C₄)-alkyl, wherein the alkyl is unsubstituted or mono- to tetrasubstituted by halogens, and R^6 is, independently of R^5 , (C₁-C₄)-alkyl, wherein the alkyl is unsubstituted or mono- to trisubstituted, by

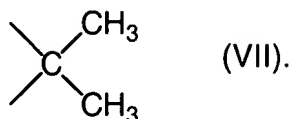
- a) halogens,
 - b) phenyl-(CH₂)_m-, wherein the phenyl is unsubstituted or mono- to trisubstituted, independently of one another, by -COOH, -CN, or -CF₃, and m is the integer zero, 1, 2, 3, 4, 5, or 6,
 - c) -COOH,
 - d) -CN, or
 - e) -CF₃, or
- 2) a radical of formula VI,



in which R^4 is as defined above; and

Z is 1) -O- or

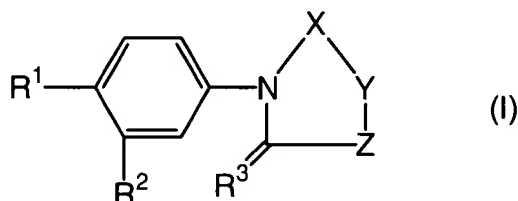
2) a radical of formula VII



wherein said compound of formula I is released from the film formed by application of said composition to a skin surface.

22. (Amended) A process for making a product for treatment of androgenic alopecia[or hirsutism], comprising the step of forming said product by bringing together:

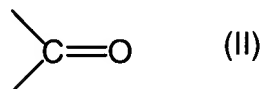
- a) at least one physiologically tolerated film-forming agent;
- b) at least one physiologically tolerated solvent;
- c) at least one plasticizer; and
- d) a compound of the formula I



or a stereoisomeric form or a physiologically tolerated salt of any of the foregoing, in which:

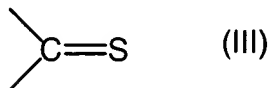
- | | |
|-------------------|-----------------------------------------------------|
| R ¹ is | 1) -CN, |
| | 2) -NO ₂ , |
| | 3) a halogen, or |
| | 4) (C ₁ -C ₄)-alkyl-C(O)-OH; |
| R ² is | 1) -CF ₃ , |

- 2) a halogen, or
- 3) -CN;
- R³ is 1) =O,
- 2) =S, or
- 3) =NH;
- X is 1) a radical of formula II

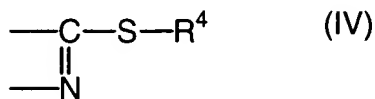


or

- 2) a radical of formula III



or X and Y together form a group of formula IV



- in which R⁴ is 1) hydrogen atom,
- 2) (C₁-C₆)-alkyl-,
- 3) (C₂-C₆)-alkenyl-, or
- 4) (C₁-C₆)-alkyl-,

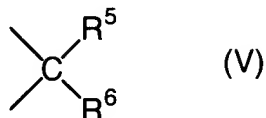
wherein the alkyl is mono- to trisubstituted by

- 4.1 -OH,
- 4.2 halogens,
- 4.3 -O-(C₁-C₄)-alkyl,

4.4 -CN, or

4.5 -SH;

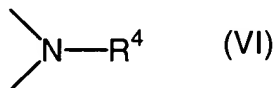
Y is 1) a radical of formula V



in which:

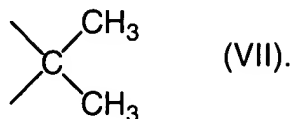
R^5 is, independently of R^6 , a hydrogen atom or $(\text{C}_1\text{-C}_4)$ -alkyl, wherein the alkyl is unsubstituted or mono- to tetrasubstituted by halogens, and R^6 is, independently of R^5 , $(\text{C}_1\text{-C}_4)$ -alkyl, wherein the alkyl is unsubstituted or mono- to trisubstituted, by

- a) halogens,
 - b) phenyl- $(\text{CH}_2)_m$ -, wherein the phenyl is unsubstituted or mono- to trisubstituted, independently of one another, by -COOH, -CN, or -CF₃, and m is the integer zero, 1, 2, 3, 4, 5, or 6,
 - c) -COOH,
 - d) -CN, or
 - e) -CF₃, or
- 2) a radical of formula VI,



in which R^4 is as defined above; and

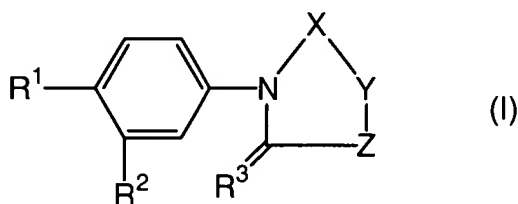
- Z is 1) -O- or
2) a radical of formula VII



wherein said compound of formula I is released from the film formed by application of said composition to a skin surface.

23. (Amended) A process for making a product intended for treatment of seborrhea or acne, comprising the step of forming said product by bringing together:

- a) at least one physiologically tolerated film-forming agent;
- b) at least one physiologically tolerated solvent;
- c) at least one plasticizer; and
- d) a compound of the formula I



or a stereoisomeric form or a physiologically tolerated salt of any of the foregoing, in which:

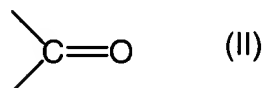
- R¹ is
- 1) -CN,
 - 2) -NO₂,
 - 3) a halogen, or
 - 4) (C₁-C₄)-alkyl-C(O)-OH;

R^2 is 1) $-CF_3$,
 2) a halogen, or

 3) $-CN$;

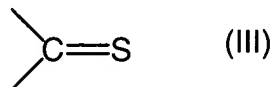
R^3 is 1) $=O$,
 2) $=S$, or
 3) $=NH$;

X is 1) a radical of formula II

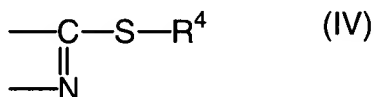


or

2) a radical of formula III



or X and Y together form a group of formula IV



in which R^4 is 1) hydrogen atom,
 2) (C_1-C_6) -alkyl-,
 3) (C_2-C_6) -alkenyl-, or
 4) (C_1-C_6) -alkyl-,

wherein the alkyl is mono- to trisubstituted by

4.1 $-OH$,

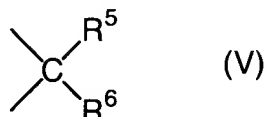
4.2 halogens,

4.3 -O-(C₁-C₄)-alkyl,

4.4 -CN, or

4.5 -SH;

Y is 1) a radical of formula V

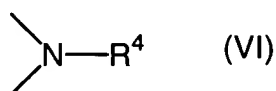


in which:

R⁵ is, independently of R⁶, a hydrogen atom or (C₁-C₄)-alkyl, wherein the alkyl is unsubstituted or mono- to tetrasubstituted by halogens, and R⁶ is, independently of R⁵, (C₁-C₄)-alkyl, wherein the alkyl is unsubstituted or mono- to trisubstituted, by

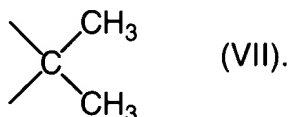
- a) halogens,
- b) phenyl-(CH₂)_m-, wherein the phenyl is unsubstituted or mono- to trisubstituted, independently of one another, by -COOH, -CN, or -CF₃, and m is the integer zero, 1, 2, 3, 4, 5, or 6,
- c) -COOH,
- d) -CN, or
- e) -CF₃, or

2) a radical of formula VI,



in which R⁴ is as defined above; and

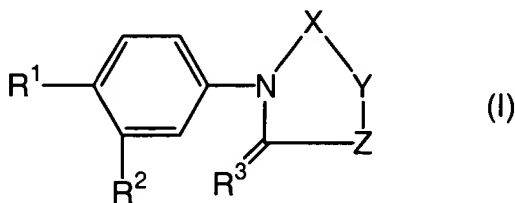
- Z is 1) -O- or
 2) a radical of formula VII



wherein said compound of formula I is released from the film formed by application of said composition to a skin surface.

28. (Amended) A process for treatment of seborrhea or acne, comprising the step of applying to a patient in need or desire thereof a composition comprising:

- a) at least one physiologically tolerated film-forming agent;
- b) at least one physiologically tolerated solvent;
- c) at least one plasticizer; and
- d) a compound of the formula I



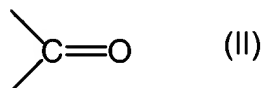
or a stereoisomeric form or a physiologically tolerated salt of any of the foregoing, in which:

- R¹ is 1) -CN,
 2) -NO₂,
 3) a halogen, or
 4) (C₁-C₄)-alkyl-C(O)-OH;

- R^2 is
- 1) $-CF_3$,
 - 2) a halogen, or
 - 3) $-CN$;

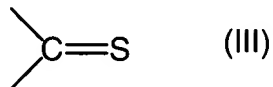
- R^3 is
- 1) $=O$,
 - 2) $=S$, or
 - 3) $=NH$;

- X is
- 1) a radical of formula II

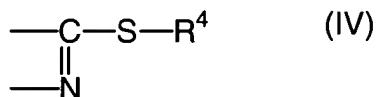


or

- 2) a radical of formula III



or X and Y together form a group of formula IV



- in which R^4 is
- 1) hydrogen atom,
 - 2) (C_1-C_6) -alkyl-,
 - 3) (C_2-C_6) -alkenyl-, or
 - 4) (C_1-C_6) -alkyl-,

wherein the alkyl is mono- to trisubstituted by

4.1 $-OH$,

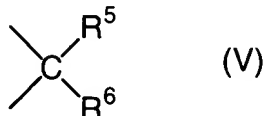
4.2 halogens,

4.3 -O-(C₁-C₄)-alkyl,

4.4 -CN, or

4.5 -SH;

Y is 1) a radical of formula V

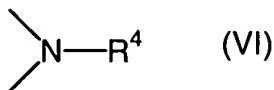


in which:

R⁵ is, independently of R⁶, a hydrogen atom or (C₁-C₄)-alkyl, wherein the alkyl is unsubstituted or mono- to tetrasubstituted by halogens, and R⁶ is, independently of R⁵, (C₁-C₄)-alkyl, wherein the alkyl is unsubstituted or mono- to trisubstituted, by

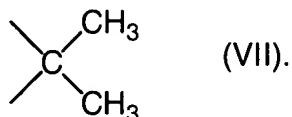
- a) halogens,
- b) phenyl-(CH₂)_m-, wherein the phenyl is unsubstituted or mono- to trisubstituted, independently of one another, by -COOH, -CN, or -CF₃, and m is the integer zero, 1, 2, 3, 4, 5, or 6,
- c) -COOH,
- d) -CN, or
- e) -CF₃, or

2) a radical of formula VI,



in which R⁴ is as defined above; and

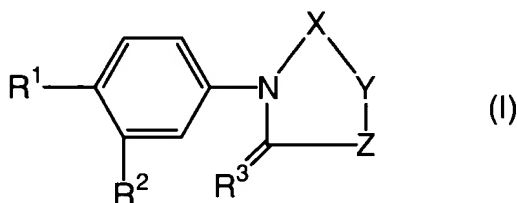
- Z is 1) -O- or
2) a radical of formula VII



wherein said compound of formula I is released from the film formed by application of said composition to a skin surface.

29. (Amended) A cosmetic composition comprising:

- a) at least one physiologically tolerated film-forming agent;
- b) at least one physiologically tolerated solvent;
- c) at least one plasticizer; and
- d) a compound of the formula I



or a stereoisomeric form or a physiologically tolerated salt of any of the foregoing, in which:

- R¹ is
- 1) -CN,
 - 2) -NO₂,
 - 3) a halogen, or
 - 4) (C₁-C₄)-alkyl-C(O)-OH;

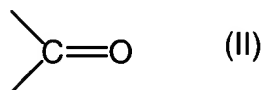
R² is 1) -CF₃,
 2) a halogen, or

 3) -CN;

R³ is 1) =O,
 2) =S, or

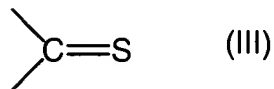
 3) =NH;

X is 1) a radical of formula II

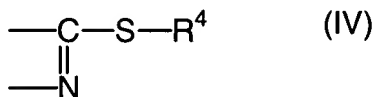


or

 2) a radical of formula III



or X and Y together form a group of formula IV



in which R⁴ is 1) hydrogen atom,
 2) (C₁-C₆)-alkyl-,
 3) (C₂-C₆)-alkenyl-, or
 4) (C₁-C₆)-alkyl-,

wherein the alkyl is mono- to trisubstituted by

4.1 -OH,

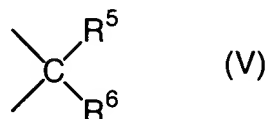
4.2 halogens,

4.3 -O-(C₁-C₄)-alkyl,

4.4 -CN, or

4.5 -SH;

Y is 1) a radical of formula V

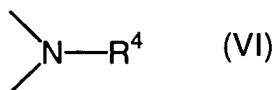


in which:

R⁵ is, independently of R⁶, a hydrogen atom or (C₁-C₄)-alkyl, wherein the alkyl is unsubstituted or mono- to tetrasubstituted by halogens, and R⁶ is, independently of R⁵, (C₁-C₄)-alkyl, wherein the alkyl is unsubstituted or mono- to trisubstituted, by

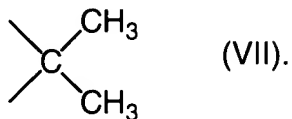
- a) halogens,
- b) phenyl-(CH₂)_m-, wherein the phenyl is unsubstituted or mono- to trisubstituted, independently of one another, by -COOH, -CN, or -CF₃, and m is the integer zero, 1, 2, 3, 4, 5, or 6,
- c) -COOH,
- d) -CN, or
- e) -CF₃, or

2) a radical of formula VI,



in which R⁴ is as defined above; and

- Z is 1) -O- or
 2) a radical of formula VII



wherein said compound of formula I is released from the film formed by application of
said composition to a skin surface.

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